

32-3020: FLT4 Recombinant Protein

Alternative Name : Tyrosine-protein kinase receptor FLT4,PCL,FLT41,FMS-LIKE TYROSINE KINASE 4,VEGFR-3,VEGFR3.

Description

Source : Insect Cells. Soluble FLT4 Human Recombinant fused with a carboxy-terminal 6X histidine-tag produced in baculovirus is a monomeric, glycosylated, polypeptide containing the extracellular part, 25-774 amino acids and having a total molecular mass of 120 kDa. The soluble receptor protein contains only the first 7 extracellular domains, which contain all the information necessary for ligand binding. The FLT4 is purified by proprietary chromatographic techniques. All three VEGF receptors belong to the class III subfamily of receptor tyrosine kinases (RTKs) characterised by the seven immunoglobulin-like loops in the extracellular domain. The expression of VEGFR-1 to -3 is almost exclusively restricted to hematopoietic precursor cells, vascular and lymphatic endothelial cells and to the monocyte/macrophage lineage. They play key roles in vasculogenesis, hematopoiesis, angiogenesis and lymphangiogenesis. The FLT-4 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 23 aa residue signal peptide. Mature VEGFR-3/FLT-4 is composed of a 751 aa residue extracellular domain, a 22 aa transmembrane domain and a 482 aa residue cytoplasmic domain. Both VEGF family members VEGF-C and VEGF-D have been shown to bind and activate VEGFR-3/FLT-4. The Flt-4 gene is widely expressed in the early embryo but becomes restricted to the lymphatic endothelial a latter stages of development. It is important for lymphangiogenesis.

Product Info

Amount :	10 µg
Purification :	Greater than 90.0% as determined by(a)Analysis by RP-HPLC.(b)Analysis by SDS-PAGE.
Content :	FLT4 was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS. Lyophilized FLT4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FLT4 should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.
Storage condition :	

Application Note

It is recommended to reconstitute the lyophilized FLT4 in sterile water not less than 100 Åµg/ml, which can then be further diluted to other aqueous solutions. Measured by its ability to bind recombinant rat VEGF-C in a functional solid phase binding assay. Immobilised recombinant human VEGFR-3/FLT-4 at 5 Åµg/ml can bind recombinant rat VEGF-C in a linear range of 8-500 ng/ml.

